1. (Currently Amended) A method for crankback handling in a multi-peer group network, comprising:

receiving, at a first node of a succeeding peer group a first connection request from a first node of a preceding peer group;

detecting a call failure occurring between nodes within the succeeding peer group, the detected call failure occurring at a location inside the succeeding peer group wherein the succeeding peer group is a different peer group from the preceding peer group;

determining whether multiple nodes in the succeeding peer group have connectivity to the preceding peer group;

determining whether multiple nodes of the preceding peer group have connectivity to the first node of the succeeding peer group;

transmitting a succeeding end crankback rather than a next higher level crankback from the succeeding peer group to the preceding peer group if multiple nodes in the succeeding peer group have connectivity to the preceding peer group and multiple nodes of the preceding peer group do not have connectivity to the first node of the succeeding peer group;

wherein the succeeding end crankback specifies a blocked interface at a first link between the preceding peer group and the succeeding peer group;

wherein the first link is located outside the preceding peer group and located outside of the succeeding peer group; and

wherein the succeeding end crankback is transmitted from the first node of the succeeding peer group;

receiving a second connection request from the preceding peer group, the second connection request using a second link to the succeeding peer group that avoids the call failure;

wherein the second link is between the first node of the ~~preceding~~ first peer group and ~~the~~ a second node of the ~~succeeding~~ second peer group or a second node of the preceding peer group and [[a]] the second node of the ~~succeeding~~ second peer group.

2. (Cancelled)

3. (Previously Presented) The method of claim 1 wherein the first node of the succeeding peer group is an entry border node configured to receive connection requests for the succeeding peer group.

4. (Previously Presented) The method of claim 1 wherein the blocked interface is specified between an originating node in the preceding peer group and an entry border node in the succeeding peer group.

5. (Previously Presented) The method of claim 4 wherein the blocked interface causes the originating node to use an alternate exit border node within the preceding peer group to implement the second link to the succeeding peer group.

6. (Original) The method of claim 1 wherein the network is an ATM (asynchronous transfer mode) network.

7. (Previously Presented) The method of claim 6 wherein the first node of the succeeding peer group is configured to use a DTL (Designated Transit List) to discover the first connection request was transmitted from the preceding peer group.

8. (Previously Presented) The method of claim 7 further comprising:

transmitting a list from the first node in the succeeding peer group to the first node in the preceding peer group, the list specifying nodes in the preceding peer group that have connectivity with the first node in the succeeding peer group; and

using the information in the list to transmit the second connection request to ensure the second link avoids the first node of the succeeding peer group;

wherein the list is transmitted in a GAT IE (Generic Application Transport Information Element).

9. (Previously Presented) A packet switch for crankback handling in a multi-peer group network comprising:

means for receiving a first connection request from a node of a first peer group;

means for detecting a call failure inside a second peer group;

means for discovering multiple nodes in the second peer group having connectivity to the first peer group;

means for discovering multiple nodes of the first peer group having connectivity to the packet switch;

means for generating a list of nodes of the first peer group having connectivity to the packet switch; and

means for transmitting a succeeding end crankback rather than a next higher level crankback from the second peer group to the first peer group wherein transmitting corresponds to whether multiple nodes in the second peer group having connectivity to the first peer group are discovered and whether multiple nodes of the first peer group having connectivity to the packet switch are discovered;

wherein the succeeding end crankback specifies a blocked interface at a first link between the first peer group and the second peer group;

wherein the first link is outside the first peer group and outside of the second peer group;

wherein the succeeding end crankback causes the first peer group to send a second connection request, the second connection request using a second link to the second peer group that avoids the call failure; and

wherein the second link is to be between the node of the preceding peer group and an alternate packet switch of the succeeding peer group or an alternate node of the preceding peer group and the alternate switch of the succeeding peer group.

10. (Previously Presented) The packet switch of claim 9 further comprising means for transmitting the next higher level crankback from the second peer group to the first peer group if multiple nodes in the second peer group having connectivity to the first peer group are not discovered.

11. (Previously Presented) The packet switch of claim 9 wherein the packet switch is an entry border node configured to receive connection requests for the second peer group and wherein the node of the first peer group is an exit border node.

12. (Previously Presented) The packet switch of claim 9 further comprising means for specifying the blocked interface is between an originating node in the first peer group and the packet switch in the second peer group.

13. (Previously Presented) The packet switch of claim 12 further comprising:

means for transmitting the list of nodes in the first peer group, wherein the first peer group uses the list to avoid the call failure on the second link;

wherein means for specifying the blocked interface causes the originating node to use an alternate exit border node within the first peer group to implement the second link to the second peer group.

14. (Previously Presented) The packet switch of claim 13:

wherein the packet switch is compatible with a version of a PNNI (private network to network interface) standard;

wherein the packet switch is an ATM switch; and

wherein the list is transported in a GAT IE.

15. (Previously Presented) The packet switch of claim 14 wherein the ATM switch further comprises means for using a DTL (Designated Transit List) to discover the first connection request was transmitted from the first peer group.

16-25. (Canceled)

26. (Currently Amended) A switch in a multi-peer group network operable to:

receive a first connection request from a first exit border node of a preceding peer group on a first link wherein the first connection request on the first link connects the first exit border node of the preceding peer group with the switch, wherein the switch is a first entry border node of a succeeding peer group and wherein the first link is outside the preceding peer group and the succeeding peer group;

detect a call failure inside the succeeding peer group;

identify one or more alternate entry border nodes in the succeeding peer group coupled to the preceding peer group capable of forming a second link between the preceding peer group and the succeeding peer group;

identify one or more exit border nodes in the preceding peer group coupled to the succeeding peer group via the switch; and

transmit a crankback from the succeeding peer group to the preceding peer group, wherein the crankback specifies the first link as blocked at a succeeding end and wherein the crankback causes a second connection request from the preceding peer group, the second connection request using the second link to the succeeding peer group that avoids the call failure;

wherein transmitting is based at least in part on identifying one or more alternate entry border nodes in the succeeding peer group coupled to the preceding peer group capable of forming a second link between the preceding peer group and the succeeding peer group or identifying one or more exit border nodes in the preceding peer group coupled to the succeeding peer group via the switch, or combinations thereof; and

wherein the second link is to be between the first exit border node of the preceding peer group and an alternate switch of the succeeding peer group or a second exit border node of the preceding peer group and an alternate switch of the succeeding peer group.

27. (Previously Presented) The switch of claim 26 wherein the crankback is a succeeding end crankback and wherein the succeeding end crankback is transmitted rather than a next higher level crankback.

28. (Previously Presented) The switch of claim 26 wherein the first link is specified between an originating node in the preceding peer group and the switch in the succeeding peer group.

29. (Cancelled)

30. (Previously Presented) The switch of claim 26 wherein the switch comprises an ATM switch.

31. (Previously Presented) The switch of claim 30 wherein the ATM switch is operable to use a Designated Transit List (DTL) to discover the first connection request was transmitted from the preceding peer group.

32. (Previously Presented) The switch of claim 26 wherein the switch is compatible with a version of a PNNI (private network to network interface) standard.

33. (Previously Presented) The switch of claim 32 further operable to:

transmit a list to a node in the preceding peer group, the list specifying the one or more exit border nodes in the preceding peer group identified as being coupled to the succeeding peer group via the switch, wherein the node uses the list to ensure the second link avoids the call failure.

34. (Previously Presented) The switch of claim 33 wherein the list is transported in a Generic Application Transport Information Element (GAT IE) using an organization specific application type.

35. (Previously Presented) The switch of claim 34 wherein the organization specific application type comprises a Cisco Organization Unique Identifier.

36. (Previously Presented) A switch in a multi-peer group network operable to:

send a first connection request from a preceding peer group on a first link wherein;

the switch is a first exit border node;

the connection request on the first link connects the first exit border node of the preceding peer group and a first entry border node of a succeeding peer group; and

the first link is outside the preceding peer group and the succeeding peer group;

if one or more alternate entry border nodes in the succeeding peer group are coupled to the preceding peer group wherein the alternate entry border nodes are capable of forming a second link between the preceding peer group and the succeeding peer group and two or more exit border nodes in the preceding peer group are not coupled to the succeeding peer group via the switch then receive a crankback from the succeeding peer group, wherein the crankback

specifies the first link as blocked between the first exit border node and the first entry border node if there is a call failure inside the succeeding peer group;

receive a list specifying nodes in the preceding peer group that have connectivity with the succeeding peer group via the first entry border node of the succeeding peer group;

send a second connection request on a second link to the succeeding peer group corresponding to the crankback wherein the second link connects the preceding peer group to the succeeding peer group via a second entry border node of the succeeding peer group;

select an alternate switch of the preceding peer group for establishing the second link to the succeeding peer group based at least in part on the list; and

forward the crankback to the alternate switch wherein the alternate switch is operable to send the second connection request that avoids the call failure.

37. (Previously Presented) The switch of claim 36 wherein the list is received in a Generic Application Transport Information Element (GAT IE) using an organization specific application type.

38. (Previously Presented) The switch of claim 37 wherein the organization specific application type comprises a Cisco Organization Unique Identifier.

39. (Previously Presented) An entry border node containing circuitry configured to:

synchronize topology information with a plurality of peer switches contained in a local logical group, the topology information synchronized over intra group links that extend between the peer switches;

detect a disruption of a call extending between a destination one of the peer switches and a source located in a remote logical group, wherein the remote logical group does not participate in the topology information synchronizations, wherein the call extends over an inter group link extending between one of the peer switches and a network component operating outside the local logical group;

prior to sending a first type of crankback message to the source for the detected call disruption, determine whether one of the peer switches besides the destination peer switch has connectivity with the remote logical group;

if one of the peer switches besides the destination peer switch has connectivity with the remote logical group, do not send the first type of crankback message, and instead send a second different type of crankback message, wherein the second type of crankback message indicates communication disruption over the inter group link when in fact the communication disruption is over one of the intra group links, the second type of crankback message indicating an inter group link failure even when there is no inter group link failure, the second type of crankback message configured to cause the source to reroute the call using a different inter group link; and

otherwise, send the first type of crankback message if the second type of crankback message is not sent.

40. (Previously Presented) The entry border node of claim 39 wherein the first type of crankback message is configured to indicate to the source that communication with the local logical group is blocked.

41. (Currently Amended) The entry border node of claim 39 wherein the circuitry is further configured to:

determine whether the detected call disruption is caused by a local communication failure on one of the intra group links or on one of the peer switches;

if the detected call disruption is caused by a local communication failure, determine whether the local communication failure can be routed around by routing the call over the different inter group link;

if the detected call disruption is caused by [[a]] the local communication failure, and if the call can be rerouted using the different inter group link, send the second type of crankback message to indicate an inter group link failure and cause rerouting over the different inter group link; and

otherwise, send the first type of crankback message if the second type of crankback message is not sent.